



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,647	07/22/2003	Sheng Teng Hsu	SLA 0759	9728

27518 7590 10/25/2005

SHARP LABORATORIES OF AMERICA, INC
5750 NW PACIFIC RIM BLVD
CAMAS, WA 98642

EXAMINER

NGUYEN, LONG T

ART UNIT	PAPER NUMBER
----------	--------------

2816

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,647

Applicant(s)

TENG HSU, SHENG

Examiner

Long Nguyen

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/22/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of numerous informalities: for example, on line 3 of page 20, "Fig. 1" should be changed to --Fig. 4--; on lines 10 and 19 of page 20, and on line 18 of page 21, "resistance states" should be changed to --resistance values--; on line 5 of page 2, "feedback circuit 131" should be changed to --feedback circuit 134--; etc.

Note that the lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in reviewing and correcting any further errors of which applicant may become aware in the specification.

Appropriate correction is required.

Claim Objections

2. Claims 1-20 are objected to because of the following informalities:

Claim 1, line 3, "the matching resistor material" should be changed to --a material of the matching resistor-- to avoid lacks clear antecedent basis.

Claim 1, line 10, "states" should be changed to --values--.

Claim 1, line 14, "circuit to" should be changed to --circuit coupled to--.

Claims 2-4 are objected to because they include the informalities of claim 1.

Claim 3, line 1, "a pulsed" should be changed to --the pulsed--.

Claim 3, line 3-4, "the polarity, the amplitude or the duration" should be changed to --an polarity, an amplitude and a duration--.

Claim 4, line 3, --the-- should be inserted before "duration" and also before "amplitude".

Art Unit: 2816

Claim 5, line 3, “the matching resistor material” should be changed to --a material of the matching resistor-- to avoid lacks clear antecedent basis.

Claim 5, line 10, “states” should be changed to --values--.

Claim 5, line 16, “circuit to” should be changed to --circuit coupled to--.

Claim 5, line 19, “wherein the timing of the transmission gates is such that ” should be changed to --wherein the first and second transmission gates are controlled such that--.

Claim 5, line 21, “states” should be changed to --values--.

Claim 5, line 22, “a comparing signal” should be changed to --the comparing signal-- (see line 12 of claim 5).

Claims 6-16 are objected to because they include the informalities of claim 5.

Claim 9, line 1, “circuit between the” should be changed to --circuit coupled between an” to avoid lacks antecedent basis for “the output”.

Claim 9, line 2, “the input” should be changed to --an input--.

Claim 10, line 1, “the pulsed signal” should be changed to --a pulsed signal--.

Claim 11, line 1, “the pulsed signal” should be changed to --a pulsed signal--.

In claims 14-16, it appears that these claims should be depend directly on claim 12 instead of indirectly because each of these claims is define a specific material from the group that the programmable resistance material is selected from, i.e., it appears that “claim 13” on line 1 of claim 14, “claim 14” on line 1 of claim 15, and “claim 15” on line 1 of claim 16 should be changed to --claim 12--.

Claim 17, line 3, “the matching resistor material” should be changed to --a material of the matching resistor-- to avoid lacks clear antecedent basis.

Art Unit: 2816

Claims 18-20 are objected to because they include the informality of claim 17.

Claim 19, line 1, "circuit" should be changed to --method--.

Claim 20, line 1, "circuit" should be changed to --method--.

Claim 20, line 3-4, "the polarity, the amplitude or the duration" should be changed to --an polarity, an amplitude and a duration--.

Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of copending Application No. 10/895,513. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-36 of copending application 10/895,513 recite a circuit or method thereof for reversible trimming a matching resistor to a reference resistor including a resistor bridge network, comparator (comparing the resistances of the reference resistor and the matching resistor), and pulse feedback circuit which meets the recitations of claims 1-20 of the instant application. Note that claim 5 of the copending

Art Unit: 2816

application also recited the input transmission gate and the output transmission gate which are corresponding to the first and second transmission gates of the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-16 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1 and 5, the recitation “a reference resistor and a matching resistor” of the resistor bridge network (recited line 6-7) is indefinite because it is unclear antecedent basis since it is not clear if they are referred to the same respective “reference resistor” and “matching resistor” of the circuit (recited on line 1), i.e., it is not clear if the resistor bridge network comprising the same resistor “reference resistor” and “matching resistor” of the circuit. Clarification and/or appropriate correction is requested.

Claims 2-4 and 6-16 are indefinite because they include the indefiniteness of claims 1 and 5, respectively.

Also, in claim 6, “wherein the resistor network is a resistance bridge comprising a resistor, a pulse adjustable resistor” on lines 1-2 is indefinite because it is not clear whether “a pulse adjustable resistor” is the same as the matching resistor or not. If “a pulse adjustable resistor” is different with the “matching resistor”, then it is not understood which resistor (in the

Art Unit: 2816

specification and drawings) is for the adjustable resistor. It appears that “is a resistance bridge comprising a reference resistor, a pulse adjustable resistor and” on lines 1-3 be changed to --is further comprising-- to overcome the above indefiniteness and to avoid a redundant of the recitations already recited in the claim.

Also, in claim 8, “the transmission gate” lacks clear antecedent basis and it is not understood if it refers to the first transmission gate or the second transmission gate.

With respect to claim 20, “the feedback circuit” lacks clear antecedent basis, and “the comparator circuit” on line 5 also lacks clear antecedent basis. Further, the phrase “pulsed electrical signal to modify the resistance of the matching resistor, the pulse electrical signal having the polarity, the amplitude, or the duration corresponding to the comparing signal” on line 2-4 is indefinite because it is not clear whether the above phrase means the pulsed electrical signal modifies the resistance of the matching resistor corresponding to the comparing signal, or whether it means the pulsed electrical signal having a polarity, an amplitude or a duration corresponding the comparing signal. Clarification and/or appropriate correction is requested.

Allowable Subject Matter

7. Claims 1-20 would be allowable upon filing a proper Terminal Disclaimer, and if amended to overcome the informalities set forth above, and/or if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action (for claims 1-16 and 20).

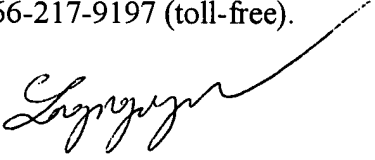
Art Unit: 2816

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directly to Examiner Long Nguyen whose telephone number is (571) 272-1753. The Examiner can normally be reached on Monday to Thursday from 8:00am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached at (571) 272-1740. The fax number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LONG NGUYEN
PRIMARY EXAMINER